

CLAIMS

1. A robotically manipulable tool, comprising:
a tool body;
a coupling attached to the tool body constructed and arranged to mate with a
5 corresponding coupling on a robot and allow the robot to mechanically connect with the
tool, manipulate the tool, and mechanically disconnect from the tool;
at least one device mounted to the tool body for performing a function of the tool;
and
a processor on the tool body constructed and arranged to receive a signal from a
10 robot controller requesting the tool to perform the function, process the signal, and cause
the at least one device to perform the function.
2. The tool of claim 1, wherein the processor is constructed and arranged to
receive a high level instruction from the robot controller, decode the instruction and
15 cause the at least one device to perform a function based on the decoded instruction.
3. The tool of claim 1, wherein the processor is constructed and arranged to
store information regarding past functions performed by the at least one device.
- 20 4. The tool of claim 1, wherein the processor is constructed and arranged to
perform at least one diagnostic test of the at least one device on the tool.
5. The tool of claim 1, wherein the processor is constructed and arranged to
receive information from a sensor on the tool, process the information and provide
25 intelligent information to the robot controller as a result of processing the information
from the sensor.
6. The tool of claim 1, wherein the coupling is constructed and arranged to
electrically couple the robot and the tool.
- 30 7. The tool of claim 1, wherein the coupling is constructed and arranged to
allow signals to be transmitted between the robot and the processor via the coupling.

8. The tool of claim 1, wherein the coupling is constructed and arranged to allow at least one of electrical, optical and fluid signals to be transmitted between the robot and the tool.

5

9. The tool of claim 1, wherein the at least one device is constructed and arranged to liquid handling functions suitable for genomic or proteomic processing.

10. The tool of claim 1, wherein the processor is constructed and arranged to cause the tool to perform functions without the tool being coupled to a robot.